The Impact of Bank Website Service Quality on Customer Satisfaction:
An Empirical Study on Swedish Banks

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Abstract

Increasing levels of internet use in Sweden have provided the country’s banking industry with an important commercial opportunity. Good website service quality is vital if banks are to ensure customer satisfaction and guarantee their continuing customers. As such, the relationship between website service quality and customer satisfaction should be continuously measured, with website processes reviewed in line with advances in ICT and changes in levels of satisfaction. The purpose of this study is to provide empirical evidence of the impact of website service quality on customer satisfaction in Swedish banks. Additionally, this study provides feedback to banks on their website services in order to aid them in avoiding any shortcomings and keeping their customers satisfied. The author used the E-S-QUAL model to measure the four dimensions of website service quality: fulfilment, availability, efficiency and privacy. Questionnaires were sent to 450 customers, of which 213 were returned, either in-person or online. The study found that website service quality has a positive effect on customer satisfaction in Swedish banks. Customers with high quality website services have significantly higher levels of satisfaction compared to those with low quality website services.

Keywords: website services quality, satisfaction, E-S-QUAL, Swedish banks.
1. Introduction

Information and communication technology (ICT) has changed the way services are delivered. The use of e-services has increased because of their time-saving and convenient nature (Paschaloudis & Tsourela, 2015). The success of e-services has led to many banks increasing their internet availability with enhanced websites that provide services such as the option to open new accounts, process loan applications, and pay bills (Sharma, 2016). These changes are viewed by some experts as an indication of a dying traditional banking system. Other experts counter that banking is now offering new services and changing its form to reflect what today’s customers demand (Damankah, Anku-Tsede, & Amankwaa, 2015). Traditional banking methods are no longer suitable and are unable to meet rapidly changing customer needs. (Romi, 2015). The use of ICT has rapidly increased in the banking industry, with innovations including automated teller machines (ATMs), telephone banking and website services (Saranya, Anitha, & Vasantha, 2014). Website services have become an attractive alternative to visiting a bank in person for many customers (Kenova & Jonasson, 2006). The reasons that customers put forward for their preference in using bank website services include: convenience, feeling more in control of the process, a desire to avoid human contact and the ability to save time (Kenova & Jonasson, 2006). Ensuring customer satisfaction is dependent on service quality, and in an online banking context, website service quality is key (Chu, Lee, & Chao, 2012).

1.1. Website Service Quality

Service quality is essential in the banking services context because it ensures high levels of customer satisfaction, hence providing a possible competitive advantage. Furthermore, service quality has an important impact on a bank’s success and performance. Service quality has received much attention because of its clear relationship with costs, financial performance and customer satisfaction (Suresh, 2016). It is defined as the difference between a customer’s expectations of service performance prior to service delivery and their perceptions of the service after it is received (A. Parasuraman, Zeithaml, & Berry, 2002; Paul, Mittal, & Srivastav, 2016). Website services allow banks to provide several products and services to their customers, in addition to ensuring customers are able to conduct financial transactions in a secure environment (Marete, Gommans, & George, 2014). Chu et al. (2012) argued that website service quality leads to greater profitability, guarantees customer satisfaction and is
key to a bank’s survival and success. In essence, the quality of a website’s services plays a major role in shaping customer satisfaction (George & Kumar, 2014).

1.2. Customers Satisfaction
Satisfaction is a multi-dimensional construct and specifies customer attitude towards a product or service (Sayani, 2015). Customer satisfaction is vital in the banking sector due to the special nature of financial services wherein intensive contact with customers who have different needs and requirements is needed. As a result, the success of an organization is determined in part by the customer satisfaction (Suresh, 2016). According to Paul et al. (2016), “customer satisfaction is a mental state, which compares the results of customer expectations prior to purchase with performance perceptions after a purchase”. Zameer, Tara, Kausar, and Mohsin (2015) argued that banks are trying to gain customer satisfaction and hence, the competitive advantage, by adopting e-services. There is a pressing need to study and examine customer satisfaction toward bank website service quality in Sweden due to the current lack of studies in this domain.

1.3. Use of Bank Website Services in Sweden
There are four main categories of banks in Sweden: commercial banks, foreign banks, savings banks and co-operative banks. In December 2016, Sweden had a total of 117 banks. The number of commercial and foreign bank branches in Sweden increased from 48 in 2004 to 68 in 2016 (Bank- and finance statistics 2016, 2017; Banks in Sweden, 2015). According to a survey carried out by the Riksbank to gain an understanding of Swedish payment habits, 85% of payments are made via bank websites (Riksbank, 2016).

In general, Swedish people enjoy easy access to the internet, with 93% of the population aged between 16 to 85 having access. Internet banking is the third most common use of the internet for 16 to 85 year-olds in Sweden ("E-commerce popular among individuals," 2016). A likely factor for this use is the proficiency of Swedish bank websites in providing internet services, widely regarded as the best in the world. All major banks in Sweden offer the ability to use website services, including the ability to buy and sell, obtain information about accounts and assets, and manage payments (Charif, Aronsohn, & Charif, 2006).
1.4. Problem Discussion
Banks provide their customers with a variety of website services, including the ability to obtain a financial overview, pay bills, apply for loans, buy and monitor unit trusts, transfer money and view records of previous transactions (Online banking: An easy method of banking, 2017). According to Kenova and Jonasson (2006) a number of factors influence how customers rate the quality of bank website services; for some customers, the response and efficiency of the service is of the greatest importance whilst others rate security and privacy as being key. Another commonly cited factor influencing customer views on bank website service quality is the website design and ease of use. It is clear from the study that customers have different expectations and requirements.

All banks realise the importance of providing good website service quality to the customers; if a bank cannot provide good website services, it risks losing customers (Charif et al., 2006). Chu et al. (2012) argued that consumer satisfaction is important for a bank’s success and service quality is the major determinant of customer satisfaction. Customers of bank websites services expected the same or better levels of service quality than customers of traditional services (Paschaloudis & Tsourela, 2015).

In accordance with earlier citations in this paper, it is posited that delivering high quality website services is of great importance for banks due to their effect on customer satisfaction. As such, this study will examine the impact of banks' websites service quality on customer satisfaction in Swedish Banks.

1.5. Aim of the study and research question
With rapid growth and extensive use of e-services in the banking practice, service quality provided through electronic platforms on bank websites becomes one of the most critical issues for banks (Zavareh et al., 2012). The purpose of this study is to provide empirical evidence on the impact of website service quality on customer satisfaction in Swedish banks. The research question proposed was as follows:

“How does website service quality impact on customer satisfaction in Swedish banks?”

The research objectives were: to evaluate Swedish banks’ website service quality and to measure levels of customer satisfaction with regards to the website services. The study will give feedback to banks on possible shortcomings in the quality of their website services and how to avoid them. Customers will be given the opportunity to evaluate their experiences with
bank websites. This research will add to the existing body of Swedish research into customer satisfaction.

2. Literature Review

Multiple researchers have studied bank website service quality, customer satisfaction and the relationship between them. Paschaloudis and Tsourela (2015) measured website service quality in Greek banks. Their study used the E-S-QUAL model to investigate the effect of e-services on customer perceptions of overall service quality. The study showed that the perceived value of a bank’s website services depends on fulfilment, compensation, efficiency and responsiveness. Paschaloudis and Tsourela (2015) concluded that “provision of a high level of website e-service quality is a goal that every bank must try to achieve”. Ariff, Yun, Zakuan, and Ismail (2013) studied the relationship between bank website service quality, satisfaction and loyalty in Malaysia. Website service quality was found to have a significant impact on customer satisfaction. Improved website service quality leads to higher customer satisfaction. A modified E-SERVQUAL model was used in this study.

Yusuf, Javan, and Jacob (2015) studied Nigerian banks and established that in order to for banks to keep their customers, relevant and high-quality e-services must be provided. Marete et al. (2014) evaluated customer satisfaction within the National Bank of Kenya. They concluded that the provision of more e-services leads to more satisfied customers. George and Kumar (2014) conducted their study on Indian banks and investigated the effect of website service quality on customer satisfaction. The key service quality dimensions identified included website attributes, reliability, responsiveness, fulfilment, efficiency and privacy. The findings of the study have implications on an executive level, encouraging banks to improve their internet banking systems by enriching these website service quality dimensions.

Zavareh et al. (2012) used the E-S-QUAL model to examine the effect of website service quality on customer satisfaction. The data was collated from 392 internet banking users from the four main public banks in Iran. The findings indicated that efficiency, reliability, fulfilment, security/trust, site aesthetics, responsiveness/contact and ease of use are the major criteria used by customers to determine the quality of website services for internet banking in Iran. In addition, there is a significant positive relationship between bank website service quality and
customer satisfaction. Tharanikaran, Sritharan, and Thuyanthy (2017) conducted their study in Batticaloa, Sri Lanka. They used E-S-QUAL to assess the degree of website service quality and customer satisfaction in Batticaloa banks. The findings indicated that website service quality and customer satisfaction were both at a high degree in e-banking in Batticaloa.

There are lack of studies investigating the relationship between website service quality and customer satisfaction in Sweden, with only degree theses currently available. In a master’s thesis, Charif et al. (2006) studied e-banking in four major Swedish banks. Their study showed that in order to provide customers with good-quality e-services, banks need to put more effort into developing their e-banking, with the provision of a personalized service now being important to increasing customer satisfaction. Kenova and Jonasson (2006) thesis study looked at people living in the university area and other randomly selected areas in Jönköping, Sweden. The study used a modified version of the SERVQUAL and E-S-QUAL model. It concluded that most customers are dissatisfied with or indifferent to some aspects of website services, including website design.

This study is unique in Sweden owing to the fact it evaluates website service quality and their impact on customer satisfaction by providing an empirical study of Swedish banks.

3. Theoretical framework

3.1. Previous research

During the past two decades, there has been extensive research into traditional service quality (non-internet based customer interactions). Only a limited number of studies have looked at website service quality (Parasuraman, Zeithaml, & Malhotra, 2005). Parasuraman, Zeithaml, and Berry (1985) developed the SERVQUAL model to measure service quality, with the dimensions of the model being reliability, responsiveness, competence, access and tangibles. Website service quality dimensions are different from traditional services in terms of human and technology interaction, website design and efficiency (Paschalousis & Tsourela, 2015). Several models have been developed to measure website service quality. Following review of
the literature, various models of measuring website service quality were extracted; table 1 contains examples of models used to assess website service quality.

<table>
<thead>
<tr>
<th>Model</th>
<th>Author</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>SITEQUAL</td>
<td>(Yoo &amp; Donthu, 2001)</td>
<td>Ease of use, aesthetic design, processing speed, and security</td>
</tr>
<tr>
<td>WEBQUAL</td>
<td>(Loiacono, Watson, &amp; Goodhue, 2002)</td>
<td>Ease of Use, Usefulness, Entertainment, Complementary and Customer Service</td>
</tr>
<tr>
<td>E-S-QUAL</td>
<td>(Parasuraman et al., 2005)</td>
<td>Efficiency Fulfilment, System availability, Privacy, Responsiveness, Compensation and Contact</td>
</tr>
<tr>
<td>QoWS Quality of Web Service</td>
<td>(Guo, Gao, &amp; Zhang, 2008)</td>
<td>Expected QoWS, Agreed QoWS, Delivered QoWS, Perceived QoWS, Transmitted QoWS, and Statistic QoWS</td>
</tr>
<tr>
<td>SERVQUAL *</td>
<td>(Lee &amp; Lin, 2005)</td>
<td>Web site design, Reliability, Responsiveness, Trust, Personalization, Overall service quality, Customer satisfaction and Purchase intentions</td>
</tr>
</tbody>
</table>

* SERVQUAL by Lee & Lin is a developed model from (Parasuraman et al., 1985)

3.2. Research model

Figure 1 illustrates the research framework using insight gained from the existing literature as its theoretical basis.

![Figure 1. Research framework.](image-url)
The author chose to use a multiple-item model (E-S-QUAL) to measure the service quality delivered by bank websites. Parasuraman et al. (2005) developed E-S-QUAL with the sole purpose of measuring website service quality (Paschaloudis & Tsourela, 2015). The E-S-QUAL model is similar to the SERVQUAL model, also developed specifically to measure website service quality (Kenova & Jonasson, 2006). E-S-QUAL is considered an extension to SERVQUAL (Paschaloudis & Tsourela, 2015). The E-S-QUAL model was used in many studies related to website service quality, such as studies by (Doost & Ashrafi, 2014; Paschaloudis & Tsourela, 2015; Sun, Wang, & Cao, 2009; Tharanikaran et al., 2017; Zavareh et al., 2012; Zhang, 2013).

This model consists of two scales. The first is the basic E-S-QUAL scale with four dimensions: efficiency, fulfilment, availability and privacy. Table 2 illustrates the dimensions and describes them. The second scale is known as E-RecS-QUAL, which measures only non-routine customer encounters with websites. It has three dimensions: responsiveness, compensation, and contact (Parasuraman et al., 2005). The author has not used the E-RecS-QUAL scale because its purpose is limited and is therefore difficult to use effectively. It is only relevant to a small number of customers (Parasuraman et al., 2005) and additionally, measuring the dimensions of E-Rec-SQUAL requires customers to have experiences of problems and complaining (Zavareh et al., 2012). In this study, there is lack of people encountering problems.

Table 2. E-S-QUAL dimensions.

<table>
<thead>
<tr>
<th>E-S-QUAL</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>The ease and speed of accessing and using the site</td>
</tr>
<tr>
<td>Fulfilment</td>
<td>The extent to which the site’s promises about order delivery and item availability are fulfilled</td>
</tr>
<tr>
<td>System availability</td>
<td>The correct technical functioning of the site</td>
</tr>
<tr>
<td>Privacy</td>
<td>The degree to which the site is safe and protects customer information</td>
</tr>
</tbody>
</table>

Source: (Parasuraman et al., 2005)
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4. Research Methodology

4.1. Data collection
The author developed a questionnaire based on his review of previous research relating to website service quality and satisfaction (see Table 5 in appendix A). The questionnaire was in Swedish, Arabic and English. The data was collected during the first week of May 2017 in two stages; the first stage was in Örebro city, the author contacted the participants directly in public near Örebro castle. The initial contact consisted of explaining the aims of the survey and ensuring all participants were users of bank website services. The second stage was conducted via electronic methods. The questionnaire was sent by email and shared on Facebook. It was designed using Google Forms and SurveyPlant.com. An explanation of the aims of the survey and a request to respondents to participate only if they were users of bank website services were included. Data was collected from customers in a number of Swedish cities. Tables 6 and 7 in appendix B show the participants’ cities and the banks they used. Of 450 questionnaires sent, 213 were returned valid.

4.2. Measures
A descriptive survey was used, with 17 items organised into three sections as follows:

- Section 1 asked for participants’ demographic information.
- Section 2 included 13 items centred around website service quality dimensions (availability, efficiency, privacy and fulfilment), adapted from the work of Parasuraman et al. (2005).
- Section 3 included 4 items based on customers satisfaction, adapted from the works of Chu et al. (2012) and Anderson and Srinivasan (2003).

The items were formatted to be relevant to the evaluation of bank website service quality and understandable for participants. Some items were not included because they did not fit the scope of the study.

The Likert scale, which ranges from “strongly disagree” (1) to “strongly agree” (5), was used in the survey. The data was exported for analysis from Microsoft Excel to Statistical Package for Social Science (SPSS), version 23.
5. Results and Discussions

Table 3 gives a summary of the sample's demographics. 52.6% of participants were male and 47.4% were female. 53.9% were 40 years of age or younger, and 47.4% were university educated. The majority of respondents were male, relatively young and well-educated. In accordance to a study by (Davidsson & Findahl, 2017) on Swedish internet users' habits, this research sample's profile closely mirrors the profile of Swedish internet users in general. Therefore, the research sample is broadly representative of Swedish society.

Table 3. Summary of the research sample's demographics.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>112</td>
<td>52.6</td>
</tr>
<tr>
<td>Female</td>
<td>101</td>
<td>47.4</td>
</tr>
<tr>
<td>Total</td>
<td>213</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 18</td>
<td>22</td>
<td>10.3</td>
</tr>
<tr>
<td>19 - 29</td>
<td>48</td>
<td>22.5</td>
</tr>
<tr>
<td>30 - 40</td>
<td>45</td>
<td>21.1</td>
</tr>
<tr>
<td>41 - 50</td>
<td>70</td>
<td>32.9</td>
</tr>
<tr>
<td>51 - 60</td>
<td>28</td>
<td>13.1</td>
</tr>
<tr>
<td>Total</td>
<td>213</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary school</td>
<td>23</td>
<td>10.8</td>
</tr>
<tr>
<td>High school</td>
<td>89</td>
<td>41.8</td>
</tr>
<tr>
<td>University</td>
<td>101</td>
<td>47.4</td>
</tr>
<tr>
<td>Total</td>
<td>213</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The reliability of the questionnaire was evaluated by assessing the consistency of the items representing each dimension of website service quality and customers satisfaction, using Cronbach’s alpha. Table 4 shows the Cronbach’s alpha values for the questionnaire items. All the reliability estimates were greater than the suggested value of 0.70 (Nunnally, 1967).

Table 4. Reliability and dimensionality of the variables used in the study.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency EFF</td>
<td>5</td>
<td>0.775</td>
</tr>
<tr>
<td>Availability AVA</td>
<td>3</td>
<td>0.742</td>
</tr>
<tr>
<td>Fulfilment FUL</td>
<td>3</td>
<td>0.738</td>
</tr>
<tr>
<td>Privacy PRI</td>
<td>2</td>
<td>0.759</td>
</tr>
<tr>
<td>Satisfaction SAT</td>
<td>4</td>
<td>0.738</td>
</tr>
</tbody>
</table>
The Impact of Bank Website Service Quality on Customer Satisfaction

Table 8 in appendix B and charts in appendix C illustrate the frequency of survey responses in percentage format according to the five-point Likert Scale. These illustrations give the author and readers clear insight into how customers perceive the quality of banks’ website services and how satisfied they are, based on the different quality dimensions included in the theoretical model.

5.1. Efficiency

The analysis of service quality dimensions starts by looking at the data for chart Q1 (appendix C) and table 8 (appendix B). At least 84.04% of the respondents are satisfied or very satisfied with regards to how easy it is to locate what they need on their bank’s website (Q1). Looking at chart Q1 in appendix C, it can be observed that only 8 respondents have stated disagree on the Likert scale, meaning that only 3.76% of the respondents were not satisfied or perceived a minimum level of service quality for this dimension. This means that in general banks’ website services are easy to find and most customers are satisfied with this service quality.

Referring to item (Q2), respondents are satisfied with the accuracy of their transactions with the banks. Chart Q2 (appendix C) and table 8(appendix B) show that at least 85.45% of the respondents are satisfied or very satisfied with their online transaction speed. A high percentage of respondents (49.77%) reported very high satisfaction with regards to this aspect of online banking services (strongly agree on the Likert scale). In contrast, only 7 respondents chose disagree on the Likert scale, meaning that only 3.29% have not received their desired level of service quality on this aspect of banks’ online services. In summary, the majority of customers are satisfied with this service quality.

Chart Q3 shows that generally, customers are satisfied with the organization of banks’ websites. Chart Q3 (appendix C) and table 8 (appendix B) illustrate that 80.68% of the respondents are satisfied or very satisfied with regards to bank website organisation. Only 8 respondents stated disagree on the Likert scale, meaning that only 3.76% have not received their desired level of service quality on this aspect of the banks’ online services. It can therefore be concluded that the majority of customers are satisfied with this service quality.

According to charts Q4 (appendix C) and table 8 (appendix B), respondents are satisfied with bank website load speed. More than 79% of the respondents are satisfied or very satisfied with these services. It can be observed on charts Q4 in (appendix C) and table 8 (appendix B) that a
high percentage of respondents (24.4%) reported very high satisfaction with these aspects of online banking services (strongly agree on the Likert scale). In addition, 14.1% of the respondents are neutrals, and only 7.6% of the respondents stated disagree or below on the Likert scale. This means that most customers are satisfied with the quality of the above services. Chart Q5 (appendix C) and table 8 (appendix B) show that in general, customers are satisfied with the ease of use of the banks’ websites. Chart Q3 (appendix C) and table 8 (appendix B) illustrate that 75.12% of the respondents are satisfied or very satisfied with this service. In addition, 16 respondents stated disagree or below on the Likert scale, meaning that only 7.51% have not received their desired level of service quality on this aspect. As such, the majority of customers are satisfied with this service quality.

The findings show that in general, customers were satisfied with all items included in the Efficiency quality dimension. This has been further reiterated in the work of (Tharanikaran et al., 2017). Furthermore, referring to the Efficiency charts in appendix C and table 8 in appendix B, it can be observed that most of the items pertaining to the Efficiency quality dimension gained high satisfaction levels from bank customers (agree or strongly agree on the Likert scale). However, a possible area of improvement in the Efficiency aspect would be the ease of use of bank websites. Chart Q5 shows that in regards to website ease of use, 17.37% of the respondents were neutral and 7.51% were dissatisfied. Therefore, this study recommends that banks improve the Efficiency aspect (ease of use) of their website services.

5.2. Availability

In reference to chart Q6 (appendix C) and table 8 (appendix B), at least 79.81% of the respondents are satisfied or very satisfied with service availability on bank websites. It can be observed on chart Q6 (appendix C) that no respondents have stated disagree or lower on the Likert scale. Thus, the results show that banks’ website services are available to use, and most customers are satisfied with this service quality.

According to charts Q7 and Q8 (appendix C) and table 8 (appendix B), respondents are satisfied with bank website page launch speed and performance. More than 86% of the respondents are satisfied or very satisfied with these services. It can be observed on charts Q7 and Q8 in (appendix C) and table 8 (appendix B) that a high percentage of respondents (26.29% in Q7 and 38.97% in Q8) reported very high satisfaction with these aspects of online banking services.
The Impact of Bank Website Service Quality on Customer Satisfaction

(strongly agree on the Likert scale). In addition, 13.15% (Q7) and 3.29% (Q8) of the respondents are neutrals, and no of the respondents stated disagree or below on the Likert scale. This means that most customers are satisfied with the quality of the above services.

Based on the numbers in the Availability charts (appendix C) and table 8 (appendix B), it can be observed that most customers were satisfied with all items included in the Availability quality dimension. Work by (Paschaloudis & Tsourela, 2015) further corroborates these findings.

5.3. Fulfilment

Chart Q9 (appendix C) and table 8 (appendix B) show that in general, customers are satisfied with the banks' fulfilment of promises through their websites services. Chart Q9 (appendix C) and table 8 (appendix B) illustrate that 71.36% of the respondents are satisfied or very satisfied with this service. In contrast, only 2 respondents stated disagree or below on the Likert scale, meaning that 0.94% did not receive their desired level of service quality on this aspect. It is clear that the majority of customers are satisfied with banks' fulfilment of promises through their websites.

Referring to item Q10, respondents are satisfied with the delivery time of their orders. Chart Q10 (appendix C) and table 8 (appendix B) show that at least 72.3% of respondents are satisfied or very satisfied with delivery time. 19.72% of respondents reported very high satisfaction with this aspect of online banking services (strongly agree on the Likert scale). In addition, only 10 respondents stated disagree on the Likert scale, corresponding to a percentage of only 4.7% who have not received their desired level of service quality on this aspect of banks’ online services. It can be concluded that the majority of customers are satisfied with this service quality.

Chart Q11 (appendix C) and table 8 (appendix B) show that in general, customers are satisfied with banks’ truthfulness regarding offers through their websites services. Chart Q11 (appendix C) and table 8 (appendix B) illustrate that 79.82% of the respondents are satisfied or very satisfied with this service. 9 respondents stated disagree or below on the Likert scale, meaning that only 4.23% have not received their desired level of service quality on this aspect. In conclusion, the majority of customers are satisfied with their bank’s truthfulness about offers through their websites services.
Referring to the Fulfilment charts in appendix C and table 8 in appendix B, it can be observed that majority of the items pertaining to the Fulfilment quality dimension were ranked as agree or strongly agree on the Likert scale, thus confirming the high satisfaction of bank customers with this aspect. This is consistent with the previous research findings of (Sakhaei, Afshari, & Esmaili, 2013). However, based on the Fulfilment charts Q9 and Q10 (appendix C) and table 8 (appendix B), it is recommended that banks improve the Fulfilment aspect of their website services (delivery), because a number of participants were not satisfied as evidenced by their ranking of the service under disagree or neutral on the Likert scale.

5.4. Privacy

According to charts Q12, Q13 (appendix C) and table 8 (appendix B), respondents are satisfied with bank policies on customer information and privacy. More than 79.34% of the respondents are satisfied or very satisfied with these services. It can be observed on charts Q12 and Q13 (appendix C) and table 8 (appendix B) that 28.64% (Q12) and 32.39% (Q13) of respondents reported very high satisfaction with these aspects of the online banking services (strongly agree on the Likert scale), as opposed to only 1.41% (Q12) and 1.88% (Q13) of respondents stating disagree or below on the Likert scale. Accordingly, it can be stated that most customers are satisfied with this service quality dimension.

The finding shows that in general, customers were satisfied with all items included under the Privacy quality dimension, this in line with work of (Doost & Ashrafi, 2014). Furthermore, referring to Privacy charts in appendix C and table 8 in appendix B, it can be observed that most of the items pertaining to the Privacy quality dimension gained high satisfaction levels (agree or strongly agree on the Likert scale), thus confirming that bank customers approve of the quality in terms of the Privacy quality dimension.

5.5. Satisfaction

As shown in charts Q14, Q15, Q16 (appendix C) and table 8 (appendix B), respondents are satisfied with their decision to choose and use the services provided by their bank’s website. More than 81.69% of the respondents are satisfied or very satisfied with these services. It is observed in charts Q14, Q15, Q16 (appendix C) and table 8 (appendix B) that a high percentage
of respondents (37.56% in Q14, 37.56% in Q15 and 38.97% in Q16) reported very high satisfaction with regards to this aspect of online banking services (strongly agree on the Likert scale). In addition, 5.64% (Q14), 2.82% (Q15) and 5.63% (Q16) of respondents stated disagree or below on the Likert scale. Therefore, it can be surmised that the majority of customers are satisfied with their decision to choose and use the services provided by their bank’s website.

Chart Q17 (appendix C) and table 8 (appendix B) show that generally, most customers are satisfied overall with the services provided by their bank’s website. Chart Q17 in (appendix C) and table 8 (appendix B) illustrate that 83.1% of the respondents are satisfied or very satisfied with this service aspect. In addition, 8 respondents stated disagree or below on the Likert scale, corresponding to only 3.76%. As such, the majority of customers are satisfied overall with the services provided by their bank’s website.

Previous studies have found that website service quality accounts for high degrees of customer satisfaction in countries such as Malaysia (Ariff et al., 2013), Greece (Paschaloudis & Tsourela, 2015), Nigeria (Yusuf et al., 2015), India (George & Kumar, 2014) and Sri Lanka (Tharanikaran et al., 2017). In addition, the findings of this study indicate that the degree of customers satisfaction is of a high level with regards to website service quality in Sweden, adding further evidence to the above studies.

This study provides a number of theoretical and practical contributions to the literature on Swedish banking. The findings answer the research question and achieve its objectives. This study’s contribution to academia lies in the fact that it confirms the four website service quality dimensions as being key factors influencing the satisfaction of bank customers in Sweden. The research shows that the provision of high level website service quality should be an aim for every bank in order to achieve customer satisfaction. These findings are in accordance with the results of other research in the same area, including studies by (Ariff et al., 2013; Chu et al., 2012; Paschaloudis & Tsourela, 2015).

Finally, the author suggests that the relationship between website service quality and customer satisfaction should be continuously measured in order to account for any changing levels of customer satisfaction in Swedish banks. Furthermore, website processes should be reviewed periodically and brought in line with advances in modern ICT.
6. Conclusion

This study answers the research question pertaining to the effect of bank website service quality on customers satisfaction in Swedish banks. It proves that the provision of high quality bank website services is key to customer satisfaction. The study’s findings are consistent with various other studies which have shown that website service quality has a positive and strong effect on customer satisfaction (Ariff et al., 2013; Ting, Ariff, Zakuan, Sulaiman, & Saman, 2016). The author used the E-S-QUAL model (Parasuraman et al., 2005) to examine the four dimensions of website service quality: Fulfilment, Availability, Efficiency and Privacy. Following a survey of 213 Swedish bank customers, the researcher concludes that the four dimensions have a positive and strong effect on customer satisfaction in Swedish banks. Furthermore, this study concludes that when banks provide high quality website services, their customer satisfaction levels will increase.

7. Limitations

This study focused on bank website service quality to achieve the research objectives, in spite of there being many other services customers use in their day to day dealings with banks, such as mobile apps, swish, mobile ID, etc. In addition, the author solely used E-S-QUAL scale in the study, dropping the E-RecS-QUAL scale from the assessment for the reasons mentioned earlier. This limits the scale of the study to not include quality measurements of how banks dealt with complaints via their websites.

Based on the findings, this study proposes the following recommendations for further research:

I. Although website services are widely used among banks customers, it is important that future studies take into account more services such as swish and mobile apps.

II. The study sample needs to be larger, in order to support the use of the E-S-QUAL model with both of its scales.
8. Future Research

Due to the time limitation for this project work, the author could not be able to do more investigations on the banks in Sweden. It's recommended that future research study the Swedish banks customers satisfaction compared to studies in other countries. In addition, comparison of the evaluation of the different banks. Finally, The future research need to have more big participants, inorder to use all E-S-QUAL model dimensions.
References


Kenova, V., & Jonasson, P. (2006). *Quality online banking services*. (Bachelor Theses), JÖNköping UNIVERSITY.


Appendix A

Table 5. The questions used in the questionnaire.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Efficiency</th>
<th>Availability</th>
<th>Fulfilment</th>
<th>Privacy</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>EFF1</td>
<td>The services provided by the bank’s website make it easy to find what I need</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td>EFF2</td>
<td>The services provided by the bank’s website enable me to complete my transactions quickly</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td>EFF3</td>
<td>The services provided by the bank’s website are well organized</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>EFF4</td>
<td>The bank’s website loads its pages fast</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q5</td>
<td>EFF5</td>
<td>The services provided by the bank’s website are simple to use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6</td>
<td>AVA1</td>
<td>The services provided by the bank’s website are always available to use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q7</td>
<td>AVA2</td>
<td>The services provided by the bank’s website launch and run right away</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q8</td>
<td>AVA3</td>
<td>Pages of the services provided by the bank’s website do not freeze after I enter my order information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q9</td>
<td>FUL1</td>
<td>The bank delivers orders promised through its website services</td>
<td></td>
<td></td>
<td></td>
<td>(Parasuraman et al., 2005)</td>
</tr>
<tr>
<td>Q10</td>
<td>FUL2</td>
<td>The bank quickly delivers what I ordered through its website services</td>
<td></td>
<td></td>
<td></td>
<td>(Parasuraman et al., 2005)</td>
</tr>
<tr>
<td>Q11</td>
<td>FUL3</td>
<td>The bank is truthful about its offers in its website services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q12</td>
<td>PRI1</td>
<td>The bank protects information about my web transactions when I use the services provided by its website</td>
<td></td>
<td></td>
<td></td>
<td>(Parasuraman et al., 2005)</td>
</tr>
<tr>
<td>Q13</td>
<td>PRI2</td>
<td>The bank does not share my personal information with other sites</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q14</td>
<td>SAT1</td>
<td>I am satisfied with my decision to use the services provided by this bank’s website</td>
<td></td>
<td></td>
<td></td>
<td>(Anderson &amp; Srinivasan, 2003)</td>
</tr>
<tr>
<td>Q15</td>
<td>SAT2</td>
<td>I believe that I did the right thing when I chose using the services provided by this bank’s website</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q16</td>
<td>SAT3</td>
<td>I feel satisfied regarding my decision to use the services provided by this bank’s website.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q17</td>
<td>SAT4</td>
<td>Overall, I am satisfied with the services provided by this bank’s website.</td>
<td></td>
<td></td>
<td></td>
<td>(Chu et al., 2012)</td>
</tr>
</tbody>
</table>
The Impact of Bank Website Service Quality on Customer Satisfaction

Appendix B

Table 6. List of the cities of the participated customers.

<table>
<thead>
<tr>
<th>City</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Örebro</td>
<td>81</td>
<td>38</td>
</tr>
<tr>
<td><strong>Stockholm</strong></td>
<td>45</td>
<td>21.1</td>
</tr>
<tr>
<td>Gothenburg</td>
<td>27</td>
<td>12.7</td>
</tr>
<tr>
<td>Malmo</td>
<td>20</td>
<td>9.4</td>
</tr>
<tr>
<td>Vaxjo</td>
<td>11</td>
<td>5.2</td>
</tr>
<tr>
<td>Västerås</td>
<td>10</td>
<td>4.7</td>
</tr>
<tr>
<td>Bromma</td>
<td>8</td>
<td>3.8</td>
</tr>
<tr>
<td>Vanersborg</td>
<td>4</td>
<td>1.9</td>
</tr>
<tr>
<td>Hollviken</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>Llimhamn</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Eskilstuna</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>213</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 7. List of the banks of the participated customers.

<table>
<thead>
<tr>
<th>Bank Name</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swedbank</td>
<td>78</td>
<td>36.6</td>
</tr>
<tr>
<td>Nordea</td>
<td>48</td>
<td>22.5</td>
</tr>
<tr>
<td>SEB</td>
<td>46</td>
<td>21.6</td>
</tr>
<tr>
<td>Handelsbanken</td>
<td>20</td>
<td>9.4</td>
</tr>
<tr>
<td>Länsförsäkringar</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>Sparbanken</td>
<td>6</td>
<td>2.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>213</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 8. Frequency of the respondents’ answers on Likert scale.

<table>
<thead>
<tr>
<th>Q1</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
</tr>
<tr>
<td>Q1</td>
<td>8</td>
<td>3.8</td>
<td>0</td>
<td>0</td>
<td>26</td>
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<tr>
<td>Q2</td>
<td>7</td>
<td>3.0</td>
<td>0</td>
<td>0</td>
<td>24</td>
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<tr>
<td>Q3</td>
<td>8</td>
<td>3.8</td>
<td>0</td>
<td>0</td>
<td>34</td>
</tr>
<tr>
<td>Q4</td>
<td>8</td>
<td>3.8</td>
<td>8</td>
<td>3.8</td>
<td>30</td>
</tr>
<tr>
<td>Q5</td>
<td>13</td>
<td>6.1</td>
<td>3</td>
<td>1.4</td>
<td>37</td>
</tr>
<tr>
<td>Q6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>43</td>
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<tr>
<td>Q7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>Q8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Q9</td>
<td>2</td>
<td>0.9</td>
<td>0</td>
<td>0</td>
<td>59</td>
</tr>
<tr>
<td>Q10</td>
<td>10</td>
<td>4.7</td>
<td>0</td>
<td>0</td>
<td>49</td>
</tr>
<tr>
<td>Q11</td>
<td>5</td>
<td>2.3</td>
<td>4</td>
<td>1.9</td>
<td>34</td>
</tr>
<tr>
<td>Q12</td>
<td>3</td>
<td>1.4</td>
<td>0</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>Q13</td>
<td>4</td>
<td>1.9</td>
<td>0</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>Q14</td>
<td>5</td>
<td>2.3</td>
<td>7</td>
<td>3.3</td>
<td>27</td>
</tr>
<tr>
<td>Q15</td>
<td>4</td>
<td>1.9</td>
<td>2</td>
<td>0.9</td>
<td>17</td>
</tr>
<tr>
<td>Q16</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Q17</td>
<td>7</td>
<td>3.3</td>
<td>1</td>
<td>0.5</td>
<td>28</td>
</tr>
</tbody>
</table>
Appendix C

The Impact of Bank Website Service Quality on Customer Satisfaction

![Bar Chart Efficiency Q 1](chart1.png)

- Disagree: 3.76%
- Neutral: 12.21%
- Agree: 53.52%
- Strongly agree: 30.52%

![Bar Chart Efficiency Q 2](chart2.png)

- Disagree: 3.25%
- Neutral: 11.27%
- Agree: 35.68%
- Strongly agree: 49.77%

![Bar Chart Efficiency Q 3](chart3.png)

- Disagree: 3.76%
- Neutral: 15.96%
- Agree: 53.99%
- Strongly agree: 26.29%
The Impact of Bank Website Service Quality on Customer Satisfaction

![Bar Chart for Efficiency Q 4]

- Strongly disagree: 2.35%
- Disagree: 14.06%
- Neutral: 3.75%
- Agree: 55.40%
- Strongly agree: 2.44%

![Bar Chart for Efficiency Q 5]

- Strongly disagree: 1.41%
- Disagree: 6.10%
- Neutral: 17.37%
- Agree: 45.07%
- Strongly agree: 30.05%

![Bar Chart for Availability Q 6]

- Neutral: 20.19%
- Agree: 51.17%
- Strongly agree: 26.64%
The Impact of Bank Website Service Quality on Customer Satisfaction

Availability Q 7

- Neutral: 13.15%
- Agree: 60.56%
- Strongly agree: 26.29%

Availability Q 8

- Neutral: 3.29%
- Agree: 57.75%
- Strongly agree: 38.97%

Fulfillment Q 9

- Disagree: 0.94%
- Neutral: 27.70%
- Agree: 43.66%
- Strongly agree: 27.70%

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The Impact of Bank Website Service Quality on Customer Satisfaction

**Fulfillment Q 10**

- Disagree: 4.69%
- Disagree: 23.00%
- Agree: 52.58%
- Strongly agree: 19.72%

**Fulfillment Q 11**

- Strongly disagree: 1.88%
- Disagree: 2.35%
- Neutral: 15.98%
- Agree: 39.91%
- Strongly agree: 39.91%

**Privacy Q 12**

- Disagree: 1.41%
- Neutral: 16.43%
- Agree: 53.52%
- Strongly agree: 28.64%
The Impact of Bank Website Service Quality on Customer Satisfaction

Privacy Q 13

Satisfaction Q 14

Satisfaction Q 15
The Impact of Bank Website Service Quality on Customer Satisfaction

**Satisfaction Q 16**

- Neutral: 5.63%
- Agree: 55.40%
- Strongly agree: 38.97%

**Satisfaction Q 17**

- Strongly disagree: 0.47%
- Disagree: 3.29%
- Neutral: 13.15%
- Agree: 53.05%
- Strongly agree: 30.05%